

Mineral Industry Surveys

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VANADIUM IN JULY 2004

Reported domestic consumption of vanadium in July 2004 was about 1% less than that of the previous month and was about 7% more than that of July 2003, according to the U.S. Geological Survey. Year-to-date consumption of vanadium from January through July was about 19% more than during the same period in 2003. Consumer stocks of vanadium, in all forms, were 238 metric tons (t) at the beginning of 2004 and 219 t at the end of July.

According to Ryan's Notes (2004b), U.S. ferrovanadium (FeV) prices ranged from \$10.733 to \$11.600 per pound of vanadium content in July, as compared with \$12.044 to \$12.444 in June. European FeV prices ranged from \$19.911 to \$20.889 per kilogram in July, as compared with \$24.417 to \$25.139 in June. Vanadium pentoxide (V_2O_5) prices ranged from \$5.300 to \$5.500 per pound in July as compared with \$5.739 to \$5.878 in June.

Metallurg Inc. failed to make its \$7.7 million, semi-annual interest payment on its Senior Discount notes due 2008. The payment was due on July 15, but under terms of the indenture the company could make the payment during a 30-day grace period. Failure to make the payment during the grace period could trigger a foreclosure on all its outstanding common stock under terms of its revolving credit facility with Fleet National Bank. Metallurg said it does not anticipate having sufficient funds to purchase all of the Senior Notes and was in an advanced stage of negotiations with a potential lender regarding refinancing of the Fleet Credit Facility. If Metallurg is not able to reach the necessary agreements, it may have to seek protection under U.S. bankruptcy code (Ryan's Notes, 2004a).

Strategic Minerals Corp. created a new subsidiary company to operate its vanadium business in the United States. The new company, Stratcor, Inc., which consolidated functions handled by U.S. Vanadium Corp. and Stratcor Performance Materials, Inc., will manage vanadium plants in Hot Springs, LA, and Niagara Falls, NY, as well as sales and marketing from Pittsburgh, PA. The new organizational structure took effect July 1. The company's other vanadium subsidiary, Vametco Minerals Corp., will keep responsibility for vanadium operations in South Africa (American Metal Market, 2004).

Austrian FeV producer Treibacher Industrie AG announced it would cut its output by 30–50% in August. The cutback is not related to maintenance shutdowns, but reportedly is an attempt to stimulate a price increase. FeV prices have slumped about 30% to \$20–\$19 per kilogram in July from \$28–\$27 per kilogram in May. Treibacher's move matched Russian FeV producer Tulachermet-Vanadium's announcement that it would halve production during annual maintenance in July. South African producer Highveld Steel and Vanadium Corp. also reduced FeV production in July to 100 t from a customary 240 t per month (Metal Bulletin, 2004).

References Cited

- American Metal Market, 2004, Stratcor creates new subsidiary: American Metal Market, v. 112, no. 26-5, July 2, p. 4.
Metal Bulletin, 2004, Treibacher to cut ferro-vanadium production: Metal Bulletin, no. 8852, July 26, p. 6.
Ryan's Notes, 2004a, FeV slumps; Metallurg's woes mount: Ryan's Notes, v. 10, no. 29, July 19, p. 2.
Ryan's Notes, 2004b, [untitled]: Ryan's Notes, v. 10, no. 31, August 2, p. 4.

TABLE 1
U.S. CONSUMPTION AND CONSUMER STOCKS OF VANADIUM, BY FORM¹

(Kilograms, contained vanadium)

	2003 ^p		2004			
			June		July	
	Consumption	Stocks	Consumption	Stocks	Consumption	Stocks
Ferrovandium ²	2,860,000	201,000	287,000 ^r	218,000 ^r	273,000	209,000
Vanadium-aluminum alloy	W	W	W	W	W	W
Other ³	195,000	37,400	5,390	8,330	17,200	9,780
Total	3,060,000	238,000	293,000 ^r	227,000 ^r	290,000	219,000

^pPreliminary. ^rRevised. W Withheld to avoid disclosing company proprietary data; included with "Other."

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes other vanadium-iron-carbon alloys as well as vanadium oxides added directly to steel.

³Includes other vanadium alloys, vanadium metal, vanadium pentoxide, vanadates, chlorides, other specialty chemicals, and items indicated by symbol W.

TABLE 2
U.S. CONSUMPTION OF VANADIUM, BY END USE¹

(Kilograms, contained vanadium)

	2003 ^p	2004		
		June	July	Year to date ²
Steel:				
Carbon	782,000	89,200 ^r	78,200	559,000
High-strength low-alloy	928,000	94,300 ^r	94,200	674,000
Stainless and heat-resisting	26,800	5,360	5,360	37,600
Full alloy	802,000	82,800	89,500	605,000
Tool	261,000	15,300	5,220	98,100
Total steel	2,800,000	287,000 ^r	273,000	1,970,000
Superalloys	13,800	735	519	4,460
Miscellaneous and unspecified ³	242,000	5,120	17,000	115,000
Total consumption	3,060,000	293,000 ^r	290,000	2,090,000

^pPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes revisions to prior month's data.

³Includes cast irons, alloys excluding steel and superalloys, chemical and ceramic uses, and other miscellaneous and unspecified uses.

TABLE 3
U.S. IMPORTS AND EXPORTS OF ALUMINUM-VANADIUM MASTER ALLOY AND
VANADIUM METAL, INCLUDING WASTE AND SCRAP¹

(Kilograms, gross weight)

	Aluminum-vanadium master alloy		Vanadium metal, including waste and scrap	
	Quantity	Value	Quantity	Value
Imports for consumption:				
2003	232,000	\$425,000	186,000	\$2,850,000
2004:				
April	19,000	54,100	1,290	155,000
May	--	--	9,750	233,000
June:				
Germany	--	--	1,510	104,000
Total	--	--	1,510	104,000
Year to date	19,000	54,100	18,600	1,080,000
Exports:				
2003	6,710,000	16,700,000	201,000	3,910,000
2004:				
April	922,000	1,820,000	38,500	586,000
May	477,000	1,130,000	34,100	528,000
June:				
Austria	--	--	121	46,600
Canada	97,600	213,000	--	--
India	1,560	7,440	--	--
Italy	441	6,740	--	--
Japan	1,540	7,260	3,050	108,000
Korea, Republic of	2,730	16,100	--	--
Mexico	896,000	1,700,000	--	--
Singapore	--	--	4,380	31,100
Taiwan	17,500	84,000	--	--
Thailand	25,000	119,000	--	--
United Kingdom	37,100	149,000	18,300	244,000
Total	1,080,000	2,300,000	25,900	429,000
Year to date	4,370,000	9,310,000	133,000	2,160,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 4
U.S. IMPORTS AND EXPORTS OF FERROVANADIUM, VANADIUM PENTOXIDE (ANHYDRIDE) AND
OTHER OXIDES AND HYDROXIDES OF VANADIUM¹

(Kilograms, contained vanadium)

	Ferrovanadium		Vanadium pentoxide (anhydride) ²		Other oxides and hydroxides of vanadium	
	Quantity	Value	Quantity	Value	Quantity	Value
Imports for consumption:						
2003	1,360,000	\$14,300,000	474,000	\$3,610,000	38,700	\$769,000
2004:						
April	336,000	6,490,000	60,600	431,000	108,000	1,360,000
May	176,000	4,020,000	110,000	1,300,000	--	--
June:						
Austria	103,000	2,780,000	--	--	--	--
Canada	31,000	447,000	--	--	--	--
Czech Republic	73,400	2,030,000	--	--	--	--
Germany	15,600	366,000	--	--	--	--
Japan	--	--	89	3,690	--	--
South Africa	--	--	89,700	802,000	--	--
Swaziland	77,700	1,170,000	--	--	--	--
Total	301,000	6,790,000	89,800	805,000	--	--
Year to date	1,660,000	31,400,000	703,000	5,120,000	108,000	1,360,000
Exports:						
2003	397,000	5,420,000	185,000	1,540,000	284,000	2,450,000
2004:						
April	26,700	592,000	10,500	105,000	36,200	354,000
May	21,700	476,000	1,240	13,300	32,400	208,000
June:						
Canada	--	--	--	--	25,300	242,000
Mexico	5,950	258,000	--	--	--	--
South Africa	--	--	--	--	32,100	148,000
Total	5,950	258,000	--	--	57,300	391,000
Year to date	109,000	2,620,000	219,000	1,700,000	357,000	2,650,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include catalysts containing vanadium pentoxide.

Source: U.S. Census Bureau.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF VANADIUM-BEARING ASH, SLAG¹

(Kilograms, contained vanadium pentoxide)

	Ash and residues		Ash and residues (not from the manufacture of iron and steel)		Slag, from the manufacture of iron and steel	
	Quantity	Value	Quantity	Value	Quantity	Value
2003	4,940,000	\$3,030,000	14,300,000	\$3,140,000	369,000,000	\$6,190,000
2004:						
April	--	--	751,000	130,000	16,100,000	1,570,000
May	780,000	1,900,000	1,610,000	244,000	24,200,000	920,000
June:						
Canada	--	--	679,000	117,000	58,800,000	1,330,000
Germany	--	--	--	--	122,000	212,000
Mexico	120,000	295,000	--	--	--	--
Total	120,000	295,000	679,000	117,000	58,900,000	1,540,000
Year to date	2,370,000	4,070,000	7,720,000	1,360,000	99,400,000	4,290,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF MISCELLANEOUS VANADIUM CHEMICALS¹

(Kilograms, contained vanadium)

	Sulfates		Vanadates	
	Quantity	Value	Quantity	Value
2003	--	--	72,900	\$902,000
2004:				
April	--	--	6,760	91,500
May	--	--	6,470	71,100
June:				
Japan	--	--	36	6,830
South Africa	--	--	6,270	60,600
Total	--	--	6,300	67,400
Year to date	--	--	44,300	673,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.